

Amendments to the claims:

53. (Currently Amended) A[[n]] method of providing automatic frequency compensation comprising the steps of:

providing a phase lock loop mode of operation to maintain frequency lock over a selected first range of frequency drift;

providing a sweep mode of operation to step operation of said phase lock loop first range of frequency drift over a selected second range of frequency drift; and

monitoring at least one of said phase lock loop mode of operation and said sweep mode of operation to determine a portion of said second range of frequency drift said first range is successfully able to maintain said frequency lock;

wherein the size of the first range of frequency drift is substantially equal to the lock range of the phase lock loop.

54. (Original) The method of claim 53, further comprising the step of:

providing a controllable oscillator operable under control of said phase lock loop mode of operation and said sweep mode of operation, wherein said phase lock loop mode of operation utilizes a first control signal to control said oscillator and said sweep mode of operation utilizes a second control signal to control said oscillator.

55. (Original) The method of claim 54, wherein said oscillator is a voltage controlled oscillator.

56-60 (Cancelled)

61. (Original) The method of claim 53, further comprising the step of:
storing at least a portion of information provided by said step of monitoring.
62. (New) The method of Claim 53 wherein said at least one of said phase lock loop mode of operation and said sweep mode of operation is stepped outside said selected first range of frequency drift through an offset range of frequencies in a predetermined number and increment size of steps until a desired pattern match of a recovered data signal is achieved, said steps including predetermined dwell time.
63. (New) The method of Claim 62 further comprising the step of returning to
said phase lock loop mode of operation at a frequency within said offset range of
frequencies once said desired pattern match is achieved.